

REPORT ON NUTRITION EDUCATION IN UNITED STATES MEDICAL SCHOOLS*

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IN 1985 THE Food and Nutrition Board of the National Academy of Sciences-National Research Council issued a report on Nutrition Education in U.S. Medical Schools. The report called for follow-up in two to three years to assess the progress of the report's recommendations and of nutrition education in medical schools generally. I was chairman of the NAS-NRC committee that drafted the original report.

The first part of this report is a resurvey of representative schools included in the original survey to determine what changes, if any, took place and to determine whether specific recommendations in the 1985 report have been implemented. The second part of the report deals with nutrition education programs within medical schools, problems in implementing such programs and the solutions employed.

FINDINGS

There has been a modest increase in the number of schools with required courses in nutrition (from about 20% to about 30%), but a more marked increase in the number of medical schools in the process of developing such courses. Funding for nutrition education programs in medical schools has increased from both public and private sources, but modestly at best.

It is too early to detect whether the number and quality of National Board questions have been influenced by the report, but the National Board of Medical Examiners has not appointed an advisor in nutrition. No change has been detected in the attitude of the American Association of Medical Colleges, but the Association is under new management since the original report was issued.

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Activities of regional, national, and international professional organizations relative to encouraging nutrition education in medical schools have increased modestly, but there has been no increase and perhaps a decrease in the number and quality of training programs in the area of nutrition. Modest progress that has occurred has not taken place in heavily research oriented medical schools and even those with clinical nutrition research units have not developed required courses in nutrition if they did not exist prior to their establishment.

Common problems confronting schools setting up programs include scarcity of faculty members willing to participate, opposition from curriculum committee and competition for curricular time, lack of funding to develop teaching materials and to pay faculty members.

RECOMMENDATIONS

Funding from private and federal sources must increase. National Boards must be encouraged to appoint an advisor in nutrition, particularly if the 1988 exams show little change in the quality or quantity of nutrition questions. The AAMC should be consulted about strategies to increase nutrition education in medical schools.

Major research universities must be encouraged to institute nutrition education programs in their institutions. To this end, a change in the requirement for clinical nutrition research units would be helpful.

Regional, national, and international professional organizations should expand their nutrition education activities in medical schools. The entire scope of postdoctoral programs in nutrition must be re-examined with a view toward producing not only researchers but teachers. Third party payment for physicians giving nutrition services should be developed.

THE NATIONAL ACADEMY STUDY

In 1985 the Food and Nutrition Board of the National Academy of Sciences—National Research Council (NAS-NRC) reported on the state of undergraduate nutrition education in American medical schools, concluding that the quality and quantity of nutrition education for undergraduate United States medical students were inadequate. The committee recommended a number of subject areas to be covered for all undergraduate medical students. It recognized the difficulties in incorporating this material into different types of medical curricula but still recommended, where possible, a separate, identifiable course in nutrition of at least 25 hours covering the material outlined in the report.

Although the committee recognized that each school would have to develop its own course, certain recommendations were made which were felt could stimulate the process. These included development of funding sources for curricular development and starting up nutrition programs; stimulating the National Board of Medical Examiners to increase and coordinate appropriate nutrition questions into its examinations, preferably by appointment of a nutrition advisor; encouraging the AAMC to require at least a minimal education program in nutrition for accreditation; and developing a mechanism to train teachers to implement these programs.

FOLLOW UP TO SURVEY ON NUTRITION EDUCATION IN U.S. MEDICAL SCHOOLS: THREE YEARS LATER

Twenty medical schools were contacted by telephone; and most respondents were the same as those contacted in the original study. Most indicated that no major changes had taken place in their nutrition programs, either in the number of hours taught, the focus of the material, the position in the curriculum, or the faculty involved in teaching. Several schools reported changes in their nutrition curriculum. The University of Chicago indicated that their course has become more clinically oriented, and that students now get the basics of nutrition in biochemistry and physiology courses. The Medical College of Georgia reported that, in addition to their 56 required hours and their electives in nutrition for juniors and seniors, they have begun to offer a nutrition elective for freshmen. Medical College of Pennsylvania now has a Division of Nutrition in its Department of Biochemistry and a task force looking into expansion of nutrition throughout the curriculum. The Medical College of Virginia reported a total curriculum revision, including more focus on nutrition, but without a separate course. Interest in the elective has increased, and there is a greater focus on nutritional therapy and prevention. Northeastern Ohio Universities reported adding a nutrition module to the first year curriculum.

Mt. Sinai has added seven hours of nutrition for orientation, with mixed reactions, and has also added 13 hours of instruction in the second year. The University of Alabama reported losing seven hours, but all other courses were shortened also; internal medicine has a one hour required slot where students tackle a nutrition-related problem. The University of Florida now offers a new elective in nutrition during the spring quarter of the fourth year. The University of South Carolina has made some significant changes. Nutrition is now included in all four years of the curriculum, and although not a separate course, hours are clearly identified. Approximately five hours are taught each

year, and a nutrition coordinator has also been appointed. The University of Rochester lost its nutrition course because of curriculum reorganization. There are still hours in other courses devoted to nutrition, but they are not clearly identified.

FUNDING OPPORTUNITIES

Several important funding opportunities have developed since the NAS-NRC report was issued.

National Institute of Health-National Cancer Institute. The National Cancer Institute has made a specific request for proposals to set up a nutrition education program within schools of medicine. Funds are available for curriculum planning, support of a faculty member up to 100% time for a maximum of five years, and other expenses appropriate to planning and executing the program. This effort can be traced directly to the NAS-NRC report. In fact, the report was sent to all applicants expressing interest in submitting a proposal.

National Medical Education Association. This organization supports medical education for black students and is at present developing a program to fund scholarships for black medical students for specific research projects or other special programs in nutrition.

American Cancer Research Foundation. This funds both cancer research and education, and contemplates a program to support nutrition education in medical schools.

Fund for Medical Education. The Fund is presently establishing a committee of outside experts to develop a grant program to support nutrition education in medical schools.

General Foods Foundation. The General Foods Foundation has had a long interest in nutrition education in medical schools and has funded several grants to increase such education at various medical schools. Currently it is funding a large grant to Meharry Medical School to develop a center of excellence in nutrition.

Pew Memorial Trust. The Pew Memorial Trust has recently funded a number of centers dedicated to nutrition research and education. Case-Western Reserve University and the University of Washington got funding, and Rockefeller University, together with St. Luke's-Roosevelt Hospital Center in New York, was funded to accept medical students to work on a basic science problem relevant to nutrition for one year.

Federal support for nutrition education has increased significantly but is still relatively small; private foundations are becoming interested in nutrition

education in medical schools, but the level of support remains very small; and large private “prestige” universities have not shown a great deal of interest. More Federal support is necessary; state funding must be developed for state medical schools; and private foundations need to be encouraged to develop an interest in nutrition education in medical schools.

DEVELOPMENT OF REGIONAL ORGANIZATIONS

At present two regional organizations whose purpose is to stimulate the education programs within their regions have been organized.

New York—Metropolitan Area Region (Director, Maurice Shils). This program has operated for the past five years (beginning before the NAS-NRC report). It includes all of the schools in New York City plus representatives from the New Jersey Medical School and from SUNY-Stony Brook. The program is supported by a grant for the NIH administered through the New York Academy of Medicine. The program has served as a vehicle for representatives of the various medical schools to discuss problems in nutrition education at their respective schools, and tries to be a resource for educational materials in nutrition to be used in medical education and has sponsored Nutrition Grand rounds which are held each month at a different school. Although significant changes in nutrition education have occurred in some New York medical schools during this regional activity, it is difficult to determine what, if any, has been the impact of this program on the establishment of these courses.

SERMEN is an association of southeastern medical schools which has been trying to encourage the initiation of nutrition education within its schools that do not have programs and to strengthen those programs which do exist. Leadership has been taken by the Medical College of Georgia and the University of Alabama. The latter has a strong nutrition program and a computerized bank of exam questions so that student knowledge can be assessed before and after introducing a nutrition education program. This data bank, although containing questions derived mostly from the University of Alabama, also contains questions from other schools (i.e., Columbia University). Examination questions are available to any school nationally at a nominal fee.

Limited data available suggest that regional organizations are an appropriate mechanism for stimulating interest and limited activity among participating schools. However, they are effective primarily when the individual school is already committed to a nutrition education program.